

Helpful Hints

DBA Notes

When OnBar Does Not Work

- Logical Logs are at a U status not UB status
- ***As root:***
- ***ps -ef | grep onbar***
- ***kill -9 any onbar_d -l processes and onbar -l processes***
- ***cd /etc/rc2.d***
- ***S99ism stop***
- ***This turns off onbar.***

When OnBar Does Not Work (continued)

- ***Next, as user informix:***
- ***cd /opt/informix/etc***
- ***vi onconfig.coe***
- ***search for TAPEDEV***
- ***Then insert a # sign in front of one of the lines to comment it out.***
- ***In the other line of TAPEDEV replace current path with /dev/null***

When OnBar Does Not Work

(continued)

- ***Next, search for LTAPEDEV (which is just a few lines below the TAPEDEV)***
- ***do yy p to yank and put a copy of the line with LTAPEDEV***
- ***Then insert a # sign in front of one of the lines to comment it out.***
- ***In the other line of LTAPEDEV replace current path with /dev/null.***

When OnBar Does Not Work

(continued)

- ***Then do a :wq! to write and save the file.***
- ***As user informix:***
- ***At the command line type;***
- ***ontape -a***
- ***This should backup all the logical logs***

When OnBar Does Not Work

(continued)

- ***Now go back to /opt/informix/etc and modify the onconfig.coe file to put it back to normal.***
- ***vi onconfig.coe***
- ***search for TAPEDEV***
- ***do a dd to delete the line that has /dev/null***
- ***esc***
- ***do a x to delete the # sign***

When OnBar Does Not Work

(continued)

- ***search for `LTAPEDEV` (which is just a few lines below the `TAPEDEV`)***
- ***do a `dd` to delete the line that has `/dev/null`***
- ***esc***
- ***do a `x` to delete the `#` sign***
- ***:wq! to write and save the file***

When OnBar Does Not Work

(continued)

- ***Now, go back as root:***
- ***cd /etc/rc2.d***
- ***S99ism start***
- ***This should start the onbar processes.***
- ***as user informix***
- ***ps -ef | grep nsr should see about 7 lines of processes for nsr***

When OnBar Does Not Work

(continued)

- ***If you type onbar -l nothing will happen as all logs have been backed up by ontape.***
- ***These previous steps should only be used when all attempts to use onbar -l have failed.***

Things To Remember

- **Servers must be in time sync to maintain Informix Replication and NIS+.**
- **Informix Logical Logs must always be turning over.**
- **Network connections must be active.**
- **Database chunks must be checked for adequate space.**
- **After rebooting the server onbar -l need to be executed as user informix.**

What are the Differences

- **Replicates**

- ***Define Replicates are always used when first defining the theater in Replication.***
- ***Leaf servers only communicate with their parent.***

- **Participants**

- ***Add Participants are always used when adding a server(s) to an existing Informix replicated theater***
- ***All servers communicate with each other.***
- Remember to **Execute** any RepBuilder Scripts.

What are the Differences

- **Hierarchical Replication**

- *Has levels which involve parents and children. The levels are root, non-root and leaf.*

- **Peer to Peer Replication**

- *Has only one level. The level is the root level, all servers in Peer to Peer Replication are equal.*

When and Why and How to Use IPCS

- *The IPCS command prints out the Shared Memory and Semaphores status. This is used in trying to activate the Informix Engine after an assertion failure.*
- *su - root*
- *ps -ef | grep oninit | more*
- *kill -9 <process_id> (process_id is the 2nd column and group 1 of the oninit is in the 3rd column)*

When and Why and How to Use IPCS (continued)

- ***ps -ef | grep oninit (checking that all the oninit's have been removed)***
- ***At the command line type: ipcs***
- ***Remove all the Shared Memory processes (example; ipcrm -m 1792)***
- ***Remove all the Semaphores except the one owned and grouped by root (example; ipcrm -s 458753)***

When and Why and How to Use IPCS (continued)

- ***NOTE: If removal of the root root Semaphore occurs, the server will need to be rebuilt.***
- As user informix, at the command line type: oninit

When to use DBEXPORT/DBIMPORT

- Replaces the total database schema including triggers and procedures, grants and data.
- Recommended when bringing a new server into an existing theater prior to adding it into theater replication.
- If the existing schema is corrupted from a hardware problem.
- Informix Replication must be removed from the source and target machines. This is to allow the export and import processes to get a lock on the databases.

When to use Unload/Load

- Unloading and Loading data using the data load tool should be done when loss of data has occurred or when loading a GATS training load.
- Informix Replication does not have to be removed, however watch the **RIS** and **ATS** transactions files in the **/opt/informix/work/spool** directory on the GCCS-A database servers.
- **/h/AG2DAT/bin/unload_db**
- The data_load tool is in **/h/AG2DAT/Scripts/data_load**

Removing Extra Chunks

- **Caution is the key**, when removing extra chunks there is a definite order
- At the command line as user informix type: **onstat -d**
- Review the output for chunks that have all **free space**. (**Free space must equal size**).
- At the command line as user informix type:

Removing Extra Chunks (continued)

- **onspaces -d spacename -p pathname -o offset**
- **ex: onspaces -d agdb_data_v1_2 -p /h/DBS_files -o 0**
- At the command line type: **onstat -d** (check for deletion of space)
- **cd /h/DBS_files**
- **rm spacename (example agdb_data_v1_2)**
- At the command line as user informix type:
onbar -b -F

Keeping the BASELINE Architecture

- Informix Replication requires a root level database server when defining replicates or adding participants. In Hierarchical Replication Leaf servers cannot be sync servers for defining or adding replicates.
- In Hierarchical Replication there must be two alternate routing servers in each group. Only one of the alternate routing servers is active, the second alternate routing server is **standing by** for failover and only the Informix engine should be off line, the machine should be online.